

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-313196

(43)Date of publication of application : 09.12.1997

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(51)Int.Cl.

C12P 19/44

C07H 1/00

C07H 15/26

C07H 17/065

C12N 11/02

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(21)Application number : 09-016756

(71)Applicant : CCI CORP

(22)Date of filing : 30.01.1997

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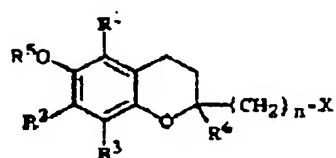
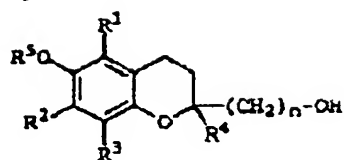
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(30)Priority

Priority number : 08 72843    Priority date : 27.03.1996    Priority country : JP

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(54) PRODUCTION OF GLYCOSIDE BY IMMOBILIZED ENZYME



# (57)Abstract:

PROBLEM TO BE SOLVED: To produce a water-soluble glycoside in high efficiency by reacting a scarcely water-soluble substance having hydroxyl group and exhibiting excellent physiological activity with a sugar in an organic solvent in the presence of an immobilized enzyme produced by immobilizing an  $\alpha$ -glucosidase on porous chitosan bead.

SOLUTION: The objective water-soluble glycoside having excellent physiological activity such as a chromanol glycoside expressed by formula II [X is glucose residue (H of the hydroxyl group in the glucose residue may be substituted with a 1-8C lower alkyl or a 1-10C lower acyl)] can be produced in high efficiency by reacting a scarcely water-soluble physiologically active substance having hydroxyl group such as a chromanol expressed by formula I (R1 to R4 are each H or a lower alkyl; R5 is H, a lower alkyl or a lower acyl; (n) is an integer of 0-4) with a sugar such as glucose in an organic solvent in the presence

of an immobilized enzyme produced by immobilizing 0.01-100mg of an  $\alpha$ -glucosidase [based on 1g of porous chitosan bead (wet state)] on a porous chitosan bead having particle diameter of 0.5-3.0mm.

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]